

NEW GENERA AND SPECIES OF AMERICAN  
MICROLEPIDOPTERA.

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***Polychrosis carduana*, new species.**

Labial palpi reddish, rusty brown, touched at the tip with black. Face, head and thorax rusty brown, top of head and middle of thorax sprinkled with black. Fore wings dark velvety brown mixed with golden ochreous scales and with extensive markings of dark metallic blue as follows: a large basal patch more or less streaked with the ground-color; an outwardly oblique blue fascia before the middle of the wing, terminating in a large nearly circular bluish yellow spot, touching the dorsal edge; another outwardly oblique fascia from apical third of costa, which is narrowed on the middle of the wing and below this divides into two more or less crooked branches, which reach the dorsal edge; both of these blue fasciæ are emphasized on the costal edge by two pairs of short yellow streaks, separated by a longer black streak; three more similar pairs of short yellow streaks on the costa beyond the second fascia start narrow blue lines which run together in a small fascia across the tip of the wing just before apex; three rather indistinct, small, round, metallic blue dots on lower part of termen; cilia dark metallic blue. Hind wings dark bronzy brown with costal edge white and cilia bluish. Abdomen dark purplish brown; anal tuft yellowish. Legs dark purplish brown; tarsal joints with yellowish annulations. Pterogostic and oral characters typical. Alar expanse: 10.5-12 mm.

Food plant: *Carduus*.*Habitat*. — Hyattsville, Maryland.*Type*. — ♂ and ♀, U. S. Nat. Mus., No. 10159.

Described from some thirty bred specimens. The larvæ are semi-social and feed in numbers, more or less exposed in a light common web in the tops of thistle; they are light greenish yellow with blackish brown head and thoracic shield and with shining black tubercles, which give them a very pretty dotted effect. On maturity they spin a piece of the leaf into a small roll for a cocoon; the moths appeared early in August.

This is the largest of the hitherto described American species of this genus, being especially more broad-winged than the others and is easily distinguished from all the others by the ochreous round spot on the middle of the dorsal edge.

***Hendecaneura* (?) *fraternana*, new species.**

Labial palpi ochreous fuscous, sprinkled with darker fuscous, especially on tip of second joint; terminal joint blackish. Face and head dark ochreous brown, on the top of the head mixed with white. Thorax dark ochreous fuscous, each scale

slightly tipped with white. Ground color of fore wings whitish but so strongly overlaid with dark fuscous and ochreous scales as to produce a marbled effect; at basal third is a dark fuscous broad irregular transverse fascia, outwardly angulated on the middle and edged with black scales; the basal space inside this fascia is strongly overlaid with dark fuscous; following the fascia is a central whitish space relieved by thin undulating transverse dark fuscous lines. Just before tornus is a large dark ochreous fuscous, black-edged dorsal spot, rounded towards the base of the wing and with the protruding outer corner pointed towards apex; above this spot is a nearly semicircular spot of the same color and also black-edged. The apical third of the wing is covered with grayish ochreous scales, tipped with white, and contains a poorly defined ocelloid spot, consisting of two silvery white patches, the outer one of which is preceded by a short black dash. Costal edge has the short fold at base dark fuscous and has five pairs of short oblique white dashes on its outer half. Apex brown, cilia white, sprinkled with fuscous. Hind wings dark ochreous fuscous with the edge darker and with a dark fuscous line on the base of the whitish cilia. Alar expanse: 19-22 mm.

*Habitat.* — West Riverside, California, October, November.

*Type.* — ♂, U. S. Nat. Mus., No. 10317. Wing-slide, in Lord Walsingham's collection.

This and the following species are those referred to by the writer at the meeting of the Entomological Society of Washington, October, 1906.

They differ from Lord Walsingham's description of the genus only in having veins 6 and 7 of the hind wings truly stalked instead of "nearly coincident along their base," diverging at about one third their "length."

If I am right in placing these species in *Hendecaneura* I should expect that the other species of the genus will be found to have these veins truly stalked, and should rely on this quite uncommon character within the subfamily in the definition of the genus rather than on the sexual dimorphism in the venation of the forewing; but as I am at present only acquainted with the genus through Lord Walsingham's description and as some deviations from this are apparent, the generic determination of this and the following should be taken as tentative only.

***Hendecaneura* (?) *filiana*, new species.**

Labial palpi dark ochreous, terminal joint brown. Face and head unicolorous, dull ochreous; thorax ochreous. Fore wing light ochreous with an ill-defined slightly darker ochreous basal patch covering the basal third; the acutely angulated outer edge of this patch protrudes into the middle of the wing. Costal fold dark fuscous. At the end of the cell is an indistinct darker ochreous spot and below it is a similarly colored ill-defined dorsal patch; these and other markings on the apical part of the wing are very indistinct, but produce the same general pattern as in the forewing

species. Apical third of the wing is irregularly overlaid with light fuscous, white-tipped scales. Costal edge narrowly dark brown with very indistinct pairs of short white dashes; just below apex is a larger white dash. Cilia fuscous. Hind wings dark ochreous fuscous. Posterior legs unmottled ochreous; anterior and middle legs with tarsi annulated with black. Alar expanse: 26 mm.

*Habitat.* — West Riverside, California, October.

*Type.* — ♂ U. S. Nat. Mus., No. 10318. Wing-slide, in Lord Walsingham's collection.\*

***Gelechia catalinella*, new species.**

Labial palpi pure white with base of second joint black externally. Tongue sparsely clothed with black scales. Antennæ purplish black. Face head and thorax pure white; patagiæ black. Fore wings unicolored blackish brown, with a purplish sheen and with striking pure white markings as follows: entire dorsal edge from base to tornus white; an outwardly oblique costal streak at basal third, reaching the middle of the wing; a narrow perpendicular transverse fascia at apical third and an inwardly oblique curved costal streak just before apex. Hindwings dark blackish fuscous, basal half of costa light silvery gray. Abdomen purplish black. Legs dark purplish brown with white spurs and broad white annulations on tibiæ and tarsi. Alar expanse: 20 mm.

*Habitat.* — Catalina Springs, Arizona; August.

*Type.* — U. S. Nat. Mus., No. 10319. Cotype in collection of Dr. Wm. Barnes, from whom I received this species.

This very striking species comes nearest *Gelechia paulella* Busck; it has however a more blackish ground color and is easily distinguished by the different white wing-ornamentation.

***Glyphidocera dimorphella*, new species.**

Labial palpi straw-yellow, lightly mottled with black scales. Antennæ yellowish fuscous, simple in both sexes, without the notch found in the males of some of the species of this genus. Head and thorax clear straw-yellow. Fore wings light straw-yellow, sparsely sprinkled with dark brown atoms, with a blackish brown round dot on the middle of the cell, another similar dot at the end of the cell and a more or less complete series of blackish brown dots along terminal edge of the wing. Cilia whitish. Hind wings light straw-colored. Abdomen yellow. Legs light yellow with darker, blackish, spurs and tarsi. Alar expanse: 10-11 mm.

*Habitat.* — Plummers Island, Md. (in the Potomac River above Washington City). (Busck.)

*Type.* — U. S. Nat. Mus., No. 10320.

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\*Since the foregoing was written I have received the opinion of my friend Mr. J. Hartley Durrant, who after examination of my slides does not believe these two species can be properly included in *Hendecaneura*. I am at present unwilling to venture the erection of a new genus in this subfamily even if such eventually shall prove necessary; but there will be no difficulty in locating the species generically by their peculiar venation, whenever the generic revision of the family shall be published, as now seems near at hand.

This and the two following species differ somewhat in venation from the definition of the genus as given by Lord Walsingham and in my *Gelechia* revision (page 916). But they are undoubtedly properly referable to that genus, the scope of which is thus somewhat widened.

These three species all have veins 7 and 9 in the forewings stalked instead of separate as in the hitherto described species of the genus and none of them possess the notched antennæ in the males as is found in the type of the genus.

The present species has vein 4 out of the stalk of veins 2 and 3 in the forewings as in the genus *Brachmia*.

One of the specimens of which I made a slide shows an abnormality which gave me considerable trouble, before it was rightly interpreted for me by my esteemed friend Mr. Edw. Meyrick. It had apparently 12 perfect veins in the forewings instead of the 11 veins normal to this genus (vein 8 being absent, coincident with 7) and the position of the additional vein, which I presume was the normally obsolete vein, out of vein 6 and ending in the terminal edge below apex, gave me, I thought, a clue to another explanation of the venation in this group, which would have excluded it from the family Gelechiidæ.

Fortunately I sought the help of Mr. Meyrick, sending him slides and specimens and this master mind at once cleared the difficulties, pointing out, that the bifurcation of vein 6 has nothing to do with vein 7, but is merely an abnormal fission; Mr. Meyrick writes that he has observed similar fission of veins in quite a number of instances in other Lepidoptera, where there was no other possible explanation, all the usual veins being present as well; \* but he does not know a single case of such a structure having become normal in a species, though similar fission of other structures, *e. g.*, of stamens in flowers is admittedly often established and normal as is proved in such cases by study of embryonic development.

I wish here once more to acknowledge publicly my great indebtedness to my learned friend, Mr. Edw. Meyrick, whose profound knowledge and most liberal assistance has again and again helped me over difficulties, which I could not have managed alone.

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\* Two such cases are recorded by the writer (Proc. U. S. Nat. Mus., Vol. XXVII, pp. 746-747, 1904); one being a specimen of *Hemerophila alpinella* Busck, which had nine veins in the right hindwing, and the other a specimen of *Scardia fuscofasciella* Chambers, with thirteen veins in the left forewing.

**Glyphidocera meyrickella, new species.**

Labial palpi ochreous, terminal joint slightly mottled with black on the inner side. Antennæ light ochreous, annulated with black. Face, head and thorax ochreous. Fore wings ochreous, evenly and profusely sprinkled with black scales; a blackish discal spot on the middle of the cell and another at the end of the cell are larger and more diffused than in the foregoing species from which the present species also differs by its larger size and by the lack of terminal black spots. Alar expanse: 14-15 mm.

*Habitat.* — Plummers Island, Md. (Busck).

*Type.* — U. S. Nat. Mus., No. 10321.

This species has vein 4 of the forewing approximate to 5, not connate with or out of vein 2. I had originally supposed it to be the female of the preceding species, but the distinct venation alone proves it a separate species, and I possess both sexes. I take pleasure in permanently associating Mr. Edw. Meyrick's name with this species, the more so, as he corrected my first impression and called my attention to the distinctness of the species.

**Glyphidocera aberratella, new species.**

Labial palpi ochreous, strongly overlaid with black scales. Antennæ dark fuscous, simple in both sexes. Face, head and thorax dark ochreous fuscous. Fore wings with the ochreous brown ground-color heavily overlaid with black scales especially along the edges and towards apex. At the end of the cell is a poorly defined blackish dot and on the middle of the fold is a similar dot. Hind wings bluish fuscous; cilia yellowish. Abdomen blackish fuscous. Legs yellowish, strongly sprinkled with black. Alar expanse: 14 mm.

*Habitat.* — Plummers Island, Md.

*Type.* — U. S. Nat. Mus., No. 10322.

The venation of the fore wing of this species differs from that of the type of the genus in having veins 8 and 6 short-stalked, enclosing apex, but I do not consider this of generic importance in the present case. The peculiar labial palpi, the very striking venation irrespective of this variation and the general habitus plainly indicate the generic position and prove the aberrations in the venation as well as the secondary sexual character of the antennæ found in some of the species to be merely of specific value.

**Epicallima edithella, new species.**

Labial palpi golden white. Face white. Antennæ bronzy black. Top of head and thorax dark bronze. Fore wings dark bronzy brown with golden yellow and silvery white markings, as follows: at basal fourth is a transverse perpendicular silvery fascia, somewhat dilated on dorsal edge; at apical third is a similar fascia which does not quite reach costal edge and which is interrupted in the middle by the

longitudinal golden yellow marking. Midway between the two fasciæ are three short longitudinal parallel silvery streaks, one just below the costal edge, the other two closer together on the middle of the wing. Between and broken up by these silvery markings, which all are edged with dark scales is a large, diffused, longitudinal, golden yellow spot reaching from base to beyond the end of the cell, confined to the upper half of the wing, but at no place touching the costal edge. Cilia dark brown. Hind wings dark bronzy brown. Abdomen bronzy with anal tuft silvery. Legs silvery, indistinctly barred with black. Alar expanse: 9-10 mm.

*Habitat*.—Center Harbor, New Hampshire. (H. G. Dyar, coll.)

*Type*.—U. S. Nat. Mus., No. 10323.

This pretty little species is nearest to *shalleriella* Chambers, which species also belongs in *Epicallima* though aberrant in having veins 7 and 8 in forewings united instead of merely stalked as is the case in the type of the genus. *Shalleriella* is a larger species differing somewhat in wing-ornamentation, notably in the possession of the white costal spot before apex and the black-silvery ocellate spots on dorsal edge.

The genus *Epicallima* differs from *Borkhausenia* mainly in the absence of pecten on the basal joint of the antennæ. Mr. Edw. Meyrick has lately recorded two species of this genus from Ceylon.

#### **Colinita, new genus.**

*Type*.—*C. sponsella* Busck.

Labial palpi long, recurved, smooth, pointed. Tongue very long, stout, scaled at base, coiled. Maxillary palpi obsolete. Antennæ simple, basal joint enlarged, with pecten. Head and thorax smooth. Forewings narrow, elongate pointed, more than four times as long as broad, smooth scaled. 12 veins: 7 and 8 stalked; 7 to termen; 3 and 4 short-stalked, 5 approximate to or out of base of 4; 3 with a strong tendency to become obsolete; 1♂ simple at base; 1c strongly developed. Hind wings somewhat narrower than the forewings; costal edge nearly straight; termen slightly sinuate; apex pointed; 8 veins; 2, 3 and 4 distant, nearly parallel; 4 and 5 short-stalked; 6 and 7 parallel; 8 free.

Posterior tibiæ clothed with rough hairs above.

The pectinated basal joint of the antennæ, the separate veins 6 and 7 in the hindwings and the hairy posterior tibiæ place this genus in the family Blastobasidæ, though the stalked veins 4 and 5 and the separate veins 3 and 4 in the hindwings are heterogenous in this family and suggest relationship with some of the Yponomeutidæ.

#### **Colinita sponsella, new species.**

Labial palpi whitish gray with a broad black annulation on the middle of second joint and another on the middle of terminal joint. Face, head and thorax whitish gray, mixed with black scales. Ground color of fore wings dirty white sprinkled with

dark fuscous brown scales; they congregate before the middle of the wing into an imperfect, curved, transverse fascia, before which is a nearly immaculate white area and beyond which the dark scales form poorly defined, irregular, longitudinal lines, meeting at apex. Hind wings yellow with light yellow cilia. Abdomen dark fuscous. Legs pepper and salt colored. Alar expanse: 20 mm.

*Habitat.* — Yuma Co., Arizona. Desert.

*Type.* — U. S. Nat. Mus., No. 10324.

To this genus belongs also *Colinita arizoniella* Kearfott, described as *Holococera* (Can. Entom., XXXIX, p. 8, 1907). This is a smaller unicolored white species.

#### **Dyotopasta, new genus.**

*Type.* — *Plutella yumaella*, Kearfott.\*

Head with rough scales. Labial palpi long, curved; second joint with rough scales above, towards the face and with a few lateral bristles; terminal joint short, blunt, porrected. Tongue and maxillary palpi obsolete. Antennæ little more than half the wing length, simple, with the somewhat enlarged basal joint thickly clothed with scales. Ocelli large, in front of the base of the antennæ. Thorax smooth. Fore wings elongate, three and one half times as long as broad; apex rounded; costal edge nearly straight; dorsal edge evenly rounded and slightly sinuate at the end of the cell. 12 veins, all separate; 7 to apex; 2 from shortly before the end of the cell; internal veins from between 10 and 11 to below 8 and from base to above 5; 1♂ strongly furcate at base. Hind wings broader than fore wings; costal edge deflected at apical third; termen strongly oblique and slightly sinuate. 8 veins; 3 from corner of cell; 4 distant, parallel with 3; 5 and 6 shortstalked; 7 parallel to 6; 1♂ furcate at base; 1c present.

I have long had this genus and its type in manuscript as has also Lord Walsingham, from whom I lately have received a specimen, bearing an appropriate generic name, which I was tempted to adopt. I should have preferred to await Lord Walsingham's publication of the genus, but the premature description of the type under a wrong generic name in another family makes it desirable to have its proper generic position published without further delay.

The genus looks superficially much like *Xylesthia* Clemens, to which genus it comes near, though differing in the lack of maxillary palpi and in the form of the labial palpi.

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\* Can. Entom., XXXIX, p. 6, Jan., 1907.